

**ABSTRACT**

**IMPROVED INK JET PRINTHEADS**

An ink jet printer including a printer cartridge containing a printhead attached to a cartridge carriage for translation of the cartridge across a print media. The printer 5 also includes an off carriage ink supply, a printer microprocessor, and a combined ink fill tube and electrical connection cable connected between the cartridge and the off carriage ink supply for providing refill ink to the ink cartridge and control of the carriage and printhead. Improvements to the printer enable low cost, high quality printing to be achieved.